

**Revised Table V-3 from Dr. Anderson's Report:  
Summary of the Derivation of Exposure Durations for Contractors**

Exposure Factor	Typical Scenario	High-End Scenario	Note
Homes with VAI	3,000,000	3,000,000	Assumed
Total Homes	91,209,000	91,209,000	U.S. Census Bureau (2001) <sup>a</sup>
Frequency of VAI homes	3.29%	9.87%	Calculation/Assumption from Dr. Anderson's report <sup>b</sup>
Working days/year	250	250	Assumption from Dr. Anderson's report
Days working in VAI home/year	8.225	24.675	Calculated <sup>c</sup>
Probability of Contact with VAI in VAI home	10%	10%	Assumption from Dr. Anderson's report
Days contacting VAI/year	.82	2.47	Calculated

<sup>a</sup> The value used represents the sum of homes in the following categories: "single family detached" (73,427,000 units), "single family attached" (8,428,000 units) and "2 to 4 units" (9,354,000 units)

<sup>b</sup> The typical frequency of homes with VAI is a simple percentage of the total homes. The high-end frequency of homes is determined by using Dr. Anderson's assumption that the frequency of VAI homes in colder climates is triple the national average.

<sup>c</sup> The VAI-home EF is the frequency of VAI homes multiplied by the number of working days per year.

**Revised Table V-4 from Dr. Anderson's Report:**  
**Summary of Estimated Exposure Durations and TWFs for a Contractor**

Activity	Scenario	Time Spent in Activity (hrs/day)	Exposure Frequency (days/yr)	Exposure Duration (years)	Total Events	Total Hours	Time Weighting Factor (%)
2/ Small area clearance	Typical	0.5	.82	11	9	4.5	.00073%
	High-end	1.5	2.47	45	111	166.5	.027%
3/ Small area clearance & fan installation	Typical	3	.82	11	9	27	.0044%
	High-end	5	2.47	45	111	555	.091%
4/ Large area clearance	Typical	1	.82	11	9	9	.0015%
	High-end	2	2.47	45	111	222	.036%
5/ Removing VAI	Typical	8	.82	11	9	72	.012%
	High-end	12	2.47	45	111	1332	.22%

**Revised Table E-5**  
**WA Study- Contractor**  
**(Using Dr. Lee's Faulty Exposure Concentrations- Excluding Alleged Cleavage Fragments)**

Residential Activity	Assumed Exposure Scenario	Scenario	Data	Time Weighting Factor	Worker (fibers per cubic centimeter PCME)/Risk
Ceiling Penetration	Small area clearance & fan inst.	Typical	Ewing 2003	.000044	0.049922544 5.1 E-07
Ceiling Penetration	Small area clearance & fan inst.	High-end	Ewing 2003	.00091	0.049922544 1.0 E-05
Moving Aside VAI-Grace Method	Large area clearance	Typical	Ewing 2003	.000015	0.521042537 1.8 E-06
Moving Aside VAI-Grace Method	Large area clearance	High-end	Ewing 2003	.00036	0.521042537 4.3 E-05
Moving Aside VAI-Homeowner Method	Large area clearance	Typical	Ewing 2003	.000015	0.567360299 2.0 E-06
Moving Aside VAI-Homeowner Method	Large area clearance	High-end	Ewing 2003	.00036	0.567360299 4.7 E-05
Shop Vac Removal VAI from top perimeter wall cavity	Small area clearance	Typical	Ewing 2003	.0000073	0 0.0 E+00
Shop Vac Removal VAI from top perimeter wall cavity	Small area clearance	High-end	Ewing 2003	.00027	0 0.0 E+00

Aggregate Risk <sup>1</sup>	Scenario	Risk
	Typical	2.5 E-06
	High-end	5.7 E-05

<sup>1</sup> Total does not include risk from "Moving Aside- Grace Method," because the higher exposure scenario "Moving Aside VAI- Homeowner Method" was included in the total.

**Revised Table E-9**  
**WA Study- Contractor**  
**(Using Dr. Lee's Faulty Exposure Concentrations- Including Alleged Cleavage Fragments)**

Residential	Assumed Exposure Scenario	Scenario	Data	Time Weighting Factor	Exposure Concentration (fibers per cubic centimeter PCMC)/Risk
Ceiling Penetration	Small area clearance & fan inst.	Typical	Ewing 2003	.000044	0.54 5.5 E-06
Ceiling Penetration	Small area clearance & fan inst.	High-end	Ewing 2003	.00091	0.54 1.1 E-04
Moving Aside VAI-Grace Method	Large area clearance	Typical	Ewing 2003	.000015	4.48 1.5 E-05
Moving Aside VAI-Grace Method	Large area clearance	High-end	Ewing 2003	.00036	4.48 3.7 E -04
Moving Aside VAI-Homeowner Method	Large area clearance	Typical	Ewing 2003	.000015	9.57 3.3 E-05
Moving Aside VAI-Homeowner Method	Large area clearance	High-end	Ewing 2003	.00036	9.57 7.9 E-04
Shop Vac Removal VAI from top perimeter wall cavity	Small area clearance	Typical	Ewing 2003	.0000073	0.69 1.2 E-06
Shop Vac Removal VAI from top perimeter wall cavity	Small area clearance	High-end	Ewing 2003	.00027	0.69 4.3 E-05

Aggregate Risk <sup>1</sup>	Scenario	Risk
	Typical	4.0 E-05
	High-end	9.4 E-04

<sup>1</sup> Total does not include risk from "Moving Aside- Grace Method," because the higher exposure scenario "Moving Aside VAI- Homeowner Method" was included in the total.